

Nuclear Facility Deactivation and Decommissioning (D&D), Remainder of Hanford (RL-0040); and River Corridor Closure Project (RL-0041)

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Demolition of 203U Tanks



Ongoing L-325 A-8 Substation construction activities

Overview

This section addresses Project Baseline Summary (PBS) RL-0040, *Nuclear Facility Deactivation and Decommissioning (D&D), Remainder of Hanford*. There are three major components to this work scope:

- Deactivation and Decommissioning (M. B. Lackey);
- Waste Site Remediation (M. B. Lackey); and
- Reliability Projects (R. G. Slocum).

This section also includes PBS RL-0041, *Nuclear Facility D&D, River Corridor Closure Project*, until this work scope transitions to the River Corridor Contractor (M. B. Lackey).

NOTE: Unless otherwise noted, all information contained herein is as of the end of August 2005.

Notable Accomplishments

PBS RL-0040, Nuclear Facility D&D, Remainder of Hanford

Deactivation and Decommissioning:

U Plant Demolition Project:

U Plant Ancillary Facilities demolition was completed in August 2005, seven months ahead of schedule and \$5.5M under budget. RL verified completion of the U Plant Ancillary D&D Performance Incentive (PI) on September 12, 2005.

Thirty-seven structures were demolished during FY 2005 (PBS RL-40 and RL-41 combined).

Waste Site Remediation:

200 Area Remedial Investigation/Feasibility Study (RI/FS) Work:

The Phase I Ecological Sampling and Analysis Plan (SAP) was approved by Environmental Protection Agency (EPA) and the State of Washington Department of Ecology (Ecology) on July 6, 2005. Phase I Soil Sampling was completed on August 17, 2005. The Phase II SAP was approved by EPA and ECOLOGY on July 21, 2005. All Phase II soil and biota sampling was completed on September 20, 2005 (150 biota and 15 soil samples).

The Tri-Party Agreement (TPA) change request was approved to pause interim milestones by 120 days on August 4, 2005. This pause will allow resources to support the development of a modified approach and path forward for completion of the remedial investigation/feasibility study (RI/FS) process for the Central Plateau Waste Sites. In support of this effort, Regulator concurrence was gained on Waste Site Model groups. Four of six workshops to gain regulator concurrence on binning of waste sites into model groups were completed.

U Plant Regional Closure:

The 200-UW-1 Record of Decision draft was issued by Ecology on September 6, 2005; the review/comment period is in progress.

The Time-Critical Removal Action (TCRA) memo for accelerating field work for barrier installation received Ecology comments on September 15, 2005. Comments were reviewed and incorporated into the TCRA, which is in RL review for the formal transmittal to Ecology.

Ecology and EPA agreed that the 216-U-12 Crib can be reclassified from a RCRA Treatment, Storage and Disposal (TSD) unit to a RCRA Past Practice (RPP) unit, and the public comment period for the TPA Change to accomplish this reclassification will run from October 3-November 17, 2005.

Notable Accomplishments, continued

Reliability Projects:

Route 4 South Repairs: The repair of Tank 382D, the 300 Area potable water ground tank, was completed August 19, 2005. The tank was returned to service August 25, 2005.

The Route 4S road refurbishment, which began on July 25, 2005, was complete when the chip seal work was finished on August 26, 2005.

PBS RL-0041, Nuclear Facility D&D, River Corridor Closure Project

Special Case Waste (SCW):

All Special Case Waste from Dry Storage and A Cell was removed and shipped as of August 11, 2005.

Removal of the Ion Exchange Columns (IXCs) requires a Justification for Continued Operation/Safety Evaluation Report (JCO/SER) to resume work. All packaging and shipping containers and documents are complete and ready for use. The JCO was transmitted to RL on August 11, 2005.

300 Area D&D:

Demolition of structures 3763 and 3701U were complete during August 2005. The remaining 300 Area structure (3701D) was demolished on September 12, 2005.

FY 2005 Funds vs. Spend Forecast (\$M)

	Projected FY 2005 Funding	FY 2005 Fiscal Year Spend Forecast	Variance
RL-0040 Nuclear Facility D&D, Remainder of Hanford	\$ 86.1	\$ 66.1	\$ 20.0
RL-0041 Nuclear Facility D&D, River Corridor Closure	\$ 15.4	\$ 15.3	0.1
Total	\$ 101.5	\$ 81.4	\$ 20.1

NOTE:

- Above numbers are rounded to the nearest \$0.1M.
- Completed transition of 300 Area work scope to Washington Closure Hanford (WCH).

FY 2005 Schedule/Cost Performance (\$M)

	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance \$	Schedule Variance %	Cost Variance \$	Cost Variance %	Budget At Completion
RL-0040 Nuclear Facility D&D, Remainder of Hanford	\$56.3	\$62.2	\$55.6	\$5.9	10.6%	\$6.6	10.6%	\$66.7
RL-0041 Nuclear Facility D&D, River Corridor Closure	\$17.0	\$18.0	\$14.4	\$1.0	5.9%	\$3.6	19.9%	\$20.1
Total	\$73.3	\$80.3	\$70.1	\$7.0	8.7%	\$10.2	12.7%	\$86.8

Numbers are rounded to the nearest \$0.1M.

Schedule Performance (+\$7.0M/+8.7%):

RL-40 – The favorable SV for the D&D Organization (+\$2.2M) is due to favorable progress on D&D and CP Closure Strategy activities (+\$6.3M). This is offset by an unfavorable SV for Waste Site Remediation (-\$3.8M) due to delays to 200-PW-1 Plutonium/Organic-Rich Process Waste Group Step 2 carbon tetrachloride field investigations. Additionally, Record of Decision (ROD) delays have impacted remedial design and planning for barrier construction at U Plant Waste Sites. Delays to U Plant will continue to grow in FY 2005, but will be recovered during FY 2006 by removing physical interferences for barrier placement early via an approved Time Critical Removal Action (TCRA). The Surveillance and Maintenance (S&M) unfavorable SV (-\$0.3M) is due to delays for PUREX NESHAPs inspection activities.

Reliability Projects' favorable SV (+\$3.7M) is due to progress in completing FY 2004 carryover work scope and ahead of schedule FY 2005 projects (+\$8.0M), offset by Road Refurbishment project acceleration (+\$0.5) and delays in initiating new starts due to continuing resolution and pending funding decisions (-\$4.8M).

The favorable SV in PBS RL-0041 (+\$1.0M) is primarily due to early completion of Uranium Disposition project work scope.

Cost Performance (+\$10.2M/+12.7%):

RL-40 – The favorable CV for the D&D organization (+\$7.9M) is primarily the result of efficiencies in demolition activities (\$7.4M), Project Management and Support (PM&S) (+\$2.0M), S&M (+\$0.6) and CP Closure Strategy (+\$0.2M). This is offset by the Wastes Sites' (-\$2.2M) additional costs to support the U Plant ROD process, decision documents, and barrier design planning. The U Plant Waste Sites overrun will be recovered during barrier construction. The S-7, T-28, and Z-7 boreholes (200-LW-1, 200 Area Chemical Lab Waste Group) and the A-4 borehole (200-MW-1 Miscellaneous Waste Group) cost more than planned due to unexpected levels of contamination. The 200-LW-1 and 200-MW-1 overruns are not recoverable.

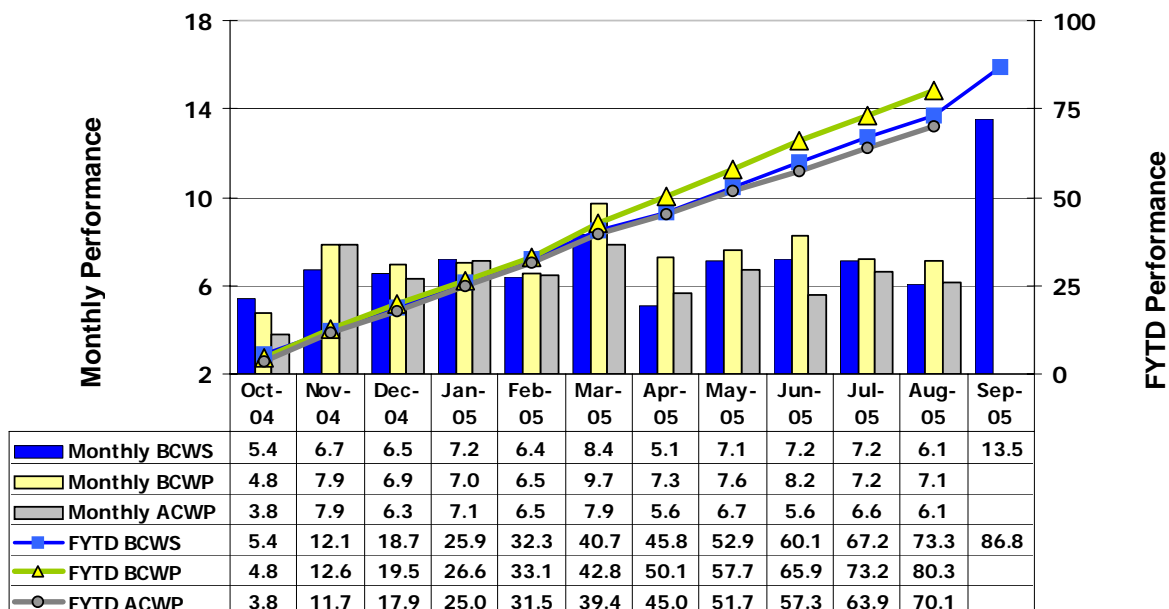
In Reliability Projects, the unfavorable CV (\$-1.6M) is a result of cost increases due to a nation-wide increase in cost of steel and large fabricated parts for Project L-334, "Minimize Potential Environmental Impacts from Export Water System Ruptures," and L-376, "Facility Safety and Efficiency Renovations." Project L-325, "A-8 Substation," mobilization costs were higher than planned. Project L-347, "VHF Narrowband Radio," was impacted by NEC safety and code violations. Project L-304, "Hanford Site Emergency Alerting System" project design and material costs were more than planned. Planned capital equipment procurements have been deferred to mitigate these cost increases.

Closure Services has a favorable CV of (+\$0.3).

The favorable cost variance in PBS RL-0041 (+\$3.6M) is largely due to lower cost for Uranium Fuel Shipments and efficiencies at the 300 Area Treated Effluent Disposal Facility (TEDF) operations.

FY 2005 Schedule/Cost Performance (\$M), continued

Performance Analysis FYTD and Monthly (\$M)



Milestone Achievement

PBS	MSN	Title	Type	Due Date	Actual Date	Forecast Date	Status / Comments
RL-0040	TRP-03-242 M-015-40C	Submit 200-CW-5 U Pond/Z Ditches Cooling Water Group FS & Submit	HQ	10/31/04	10/29/04		Completed ahead of schedule
RL-0040	WMG-05-001 M-091-40L-004	M-91-40L.1.D Submit Quarterly Burial Ground Vent and substrate Sample	HQ	12/01/04	11/12/04		Completed ahead of schedule
RL-0040	TRP-03-139 M-013-00O	Submit 1 200 NPL RI/FS (RFI/CMS) Work Plan	HQ	12/31/04	12/20/04		Completed ahead of schedule
RL-0040	WMG-04-009 M-091-40K	M-91-40K Update 218-E-12B SAP	HQ	01/15/05	08/24/04		Completed ahead of schedule
RL-0040	WMG-05-005 M-091-40L-005	M-91-40L.2.A Submit Quarterly Burial Ground Vent and substrate Sample	HQ	03/01/05	02/17/05		Completed ahead of schedule
RL-0040	WMG-05-010 M-091-40J	M-91-40J Update 218-W-3A SAP	HQ	45 day before field work begins			On schedule
RL-0040	WMG-05-009 M-091-40I	M-91-40I Update 218-W-4B SAP	HQ	45 day before field work begins			On schedule
RL-0040	WMG-05-006 M-091-40L-006	M-91-40L.2.B Submit Quarterly Burial Ground Vent and substrate Sample	HQ	06/01/05	05/12/05		Completed ahead of schedule
RL-0040	WMG-05-007 M-091-40L-007	M-91-40L.2.C Submit Quarterly Burial Ground Vent and substrate Sample	HQ	09/01/05	07/28/05		Completed ahead of schedule

Milestone Achievement, continued

PBS	MSN	Title	Type	Due Date	Actual Date	Forecast Date	Status / Comments
RL-0040	TRP-03-260 M-015-46A	200 Area Chemical Lab Waste OUs Remedial Investigation Report.	HQ	02/28/06			On schedule
RL-0040	TRP-03-248 M-020-39	Submit 216 S-10 Pond and Ditch Closure Plan to Ecology	HQ	03/31/06			On schedule
RL-0040	TRP-03-245 M-015-39C	Submit 200-CS-1 Chemical Sewer Group FS and Submit PP/Proposed	HQ	03/31/06			On schedule
RL-0040	WMG-06-001 M-091-40L-008	M-91-40L.2.D Submit Quarterly Burial Ground Vent and substrate Sample	HQ	12/01/05			On schedule
RL-0040	TRP-04-324	Issue Action Memorandum for U Plant Ancillary Facilities	RL	12/31/05	01/23/04		Completed ahead of schedule
RL-0040	TRP-04-323	Issue Record-of-Decision for Canyon Disposition Initiative	RL	12/31/05			On schedule
RL-0040	TRP-03-257 M-020-33	Submit Closure/Post Closure Plans for 216-A-10 Crib, Etc.	HQ	04/30/06			On schedule
RL-0040	TRP-03-263 M-015-44A	200-MW-1 OU Remedial Investigation Report	HQ	04/30/06			On schedule
RL-0040	TRP-03-254 M-015-43C	Submit 200-PW-2 OU FS & Proposed Plan/Proposed RCRA Permit Mod	HQ	04/30/06			On schedule
RL-0040	WMG-06-005 M-091-40L-009	M-91-40L.3.A Submit Quarterly Burial Ground Vent and substrate Sample	HQ	03/01/06			On schedule
RL-0040	TRP-04-320	Demolish Ten U Plant Ancillary Facility Structures	RL	03/31/06	09/07/05		Completed ahead of schedule
RL-0040	TRP-04-321	Demolish 10 B Plant Structures	RL	03/31/06	09/14/04		Completed ahead of schedule
RL-0041	TRP-04-325	Package, Ship and Dispose of Remaining N Reactor Fuel	RL	03/31/06	05/17/05		Completed ahead of schedule
RL-0040	WMG-06-006 M-091-40L-010	M-91-40L.3.B Submit Quarterly Burial Ground Vent and substrate Sample	HQ	06/01/06			On schedule
RL-0040	WMG-06-007 M-091-40L-011	M-91-40L.3.C Submit Quarterly Burial Ground Vent and substrate Sample	HQ	09/01/06			On schedule
RL-0040	TRP-03-266 M-015-46B	200 Area Chemical Laboratory Waste OUs Feasibility Study	HQ	09/30/06			On schedule
RL-0040	WDG-06-402	Remediate BC Crib and Trenches	RL	09/30/06			On schedule
RL-0040	WDG-06-401	Remediate U Plant Area High Risk Waste Sites	RL	09/30/06			On schedule
RL-0040	TRP-04-322	Demolish 12 additional B Plant Structures	RL	09/30/06	09/14/04		Completed ahead of schedule
RL-0041	TRP-04-326 M-092-06-T02	Complete the Disposal/Disposition of Un-Irradiated Metal Fuel	RL	09/30/06	05/17/05		Completed ahead of schedule